

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Withdrawn) An endoprosthesis having a longitudinal direction and a circumferential direction, said endoprosthesis comprising:

 a stent component having a small delivery profile and an enlarged deployed profile, said stent component having adjacent elements with space between the adjacent elements; and

 a graft material attached to the stent component covering the space between the adjacent stent elements to form a substantially integral and continuous luminal surface;

 wherein said graft material has anisotropic strength properties and is oriented so as to be weaker in the longitudinal direction than in the circumferential direction; and

 wherein the weaker anisotropic strength properties in the longitudinal direction of said graft material allow splitting of the graft material between the adjacent elements of the stent component whereby, following deployment of the endoprosthesis in a patient, the endoprosthesis may be cohesively removed from the patient by the application of tension to one end of the endoprosthesis that results in the splitting of the graft material between the adjacent elements of the stent component.

2. (Canceled)

3. (Withdrawn) The endoprosthesis of claim 1 wherein the stent component and attached graft material are removable at a profile less than the enlarged deployed profile.

4. (Withdrawn) The endoprosthesis of claim 1 wherein the stent component and attached graft material are removable at a profile less than the small delivery profile.

5. (Withdrawn) The endoprosthesis of claim 1 wherein the endoprosthesis disassembles in a helical fashion.

6. (Withdrawn) The endoprosthesis of claim 1 wherein the endoprosthesis disassembles and removes in a single piece.

7. (Withdrawn) The endoprosthesis of claim 1 wherein the endoprosthesis disassembles and removes in multiple pieces.
8. (Withdrawn) The endoprosthesis of claim 1 wherein the endoprosthesis disassembles and increases in length by at least 100%.
9. (Withdrawn) The endoprosthesis of claim 1 wherein the endoprosthesis disassembles and increases in length by at least 500%.
10. (Withdrawn) The endoprosthesis of claim 1 wherein the graft material is impermeable.
11. (Withdrawn) The endoprosthesis of claim 1 wherein the graft material is permeable.
12. (Withdrawn) The endoprosthesis of claim 1 wherein the endoprosthesis is adapted to be controllably foreshortenable by at least about 20%.
13. (Withdrawn) The endoprosthesis of claim 1 wherein the endoprosthesis is adapted to be controllably foreshortenable by at least about 50%.
14. (Canceled)
15. (Withdrawn) The endoprosthesis of claim 1 wherein the removal is atraumatic.
16. (Withdrawn) The endoprosthesis of claim 1 wherein the graft material comprises expanded polytetrafluoroethylene.
17. (Withdrawn) The endoprosthesis of claim 1 wherein the graft material comprises a tape having a length that is adapted for splitting along the length of the tape.
18. (Withdrawn) The endoprosthesis of claim 17 wherein the tape and the stent component are helically oriented at pitch angles that are substantially the same.

19. (Withdrawn) The endoprosthesis of claim 1 wherein the graft material comprises a tape, and wherein the tape and the stent component are helically oriented at pitch angles that are substantially the same.

20. (Canceled)

21. (Withdrawn) The endoprosthesis of claim 19 wherein the tape comprises expanded polytetrafluoroethylene.

22.- 24. (Canceled)

25. (Withdrawn) The endoprosthesis of claim 22 wherein the means for splitting comprises an anisotropic graft material that is tearable in one direction and resistant to tearing in a direction transverse to the one direction.

26. (Withdrawn) An endoprosthesis having a length comprising:

- a stent component;

- a graft material attached to the stent component to form a continuous luminal surface;

- wherein the endoprosthesis can be partially disassembled in situ to shorten the length of the endoprosthesis.

27. (Withdrawn) An endoprosthesis comprising:

- a stent component having a small delivery profile and an enlarged deployed profile;

- a graft material attached to the stent component to form a continuous luminal surface;

- wherein following deployment, the stent component is adapted to be cohesively disassembled from the graft material to allow for the remote removal of at least a portion of the stent component from a patient.

28. (Withdrawn) The endoprosthesis of claim 27 wherein the graft material remains in situ following removal of the stent.

29-34. (Canceled)

35. (Currently amended) ~~The endoprosthesis of claim 1~~ An endoprosthesis having a longitudinal direction and a circumferential direction, said endoprosthesis comprising:
a stent component having a small delivery profile and an enlarged
deployed profile, said stent component having adjacent elements with space between the
adjacent elements; and
a graft material having a thickness, said graft material attached to the stent
component covering the space between the adjacent stent elements to form a
substantially integral and continuous luminal surface;
wherein said graft material has anisotropic strength properties and is oriented so as
to be weaker in the longitudinal direction than in the circumferential direction and wherein
said graft material includes prescribed patterns that extend through only a portion of the
material thickness; and
wherein said graft material allows splitting of the graft material between the
adjacent elements of the stent component whereby, following deployment of the
endoprosthesis in a patient, the endoprosthesis may be cohesively removed from the
patient by the application of tension to one end of the endoprosthesis that results in the
splitting of the graft material between the adjacent elements of the stent component.

36. (Currently amended) ~~The endoprosthesis of claim 1~~ An endoprosthesis having a longitudinal direction and a circumferential direction, said endoprosthesis comprising:
a stent component having a small delivery profile and an enlarged
deployed profile, said stent component having adjacent elements with space between the
adjacent elements; and
a graft material attached to the stent component covering the space between the
adjacent stent elements to form a substantially integral and continuous luminal surface;

wherein said graft material has anisotropic strength properties and is oriented so as to be weaker in the longitudinal direction than in the circumferential direction and wherein said graft material includes perforations; and

wherein said graft material allows splitting of the graft material between the adjacent elements of the stent component whereby, following deployment of the endoprosthesis in a patient, the endoprosthesis may be cohesively removed from the patient by the application of tension to one end of the endoprosthesis that results in the splitting of the graft material between the adjacent elements of the stent component.

37. (New) An endoprosthesis according to claim 36 wherein said graft material comprises porous expanded polytetrafluoroethylene.

38. (New) An endoprosthesis according to claim 35 wherein said graft material comprises porous expanded polytetrafluoroethylene.